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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,112	12/31/2001	John J. Egan	361331-506	5381
30623 7590 01/24/2007 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. ONE FINANCIAL CENTER BOSTON, MA 02111			EXAMINER GRAFFEO, MICHEL	
			ART UNIT	PAPER NUMBER
			1614	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/24/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/038,112

Applicant(s)

EGAN ET AL.

Examiner

Michel Graffeo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4,8,9,11 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 8, 9, 11 and 13-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Status of Action***

Claims 1, 2, 4, 8, 9, 11 and 13-17 are examined.

Applicant has provided arguments for the patentability of claims 1, 2, 4, 8, 9, 11 and 13-17 in the response filed 11 July 2006.

Applicant's arguments, see response, filed 11 July 2006, have been fully considered and are not persuasive. Any rejection not specifically stated in this Office Action has been withdrawn.

### ***Claim Rejection(s)—35 USC 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 4, 8, 9, 11, 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cerami et al., RE38,330 E (already of record) in view of Lotti 5,153,205.

Cerami et al. disclose a method of inhibiting and reversing protein aging by administering to a patient in need thereof an effective amount of a thiazolium compound represented by Formula (1). Specifically, Cerami et al. teach that the method has therapeutic applications and that the thiazolium compound can be used in a method for treating lens proteins susceptible to aging. A preferred compound used in the therapeutic method is 3-(2-phenyl-2-oxoethyl)-4,5-dimethyl-thiazolium bromide. For topical or dermal application to the eye, the compound may be formulated with acceptable excipients into a lotion or ointment. The compositions for ocular administration may contain up to about 10% of the compound and may administer an

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effective amount (up to about 30 mg/kg) to a patient's eye. Finally, Cerami et al. teach that pharmaceutically acceptable salts of the compounds may also be used in the disclosed method. Please see the abstract; col. 5, lines 28-55; col. 9, lines 5-10; col. 10, lines 36-53, claim 153-, 163.

Cerami et al. do not disclose combining the preferred compound with a cholinergic agent. However, the examiner refers to (1) Lotti, which discloses a method of reducing intraocular pressure and treating glaucoma in mammals by topically administering a cholinergic agonist, i.e. pilocarpine and a cholinergic antagonist (please see col. 1, lines 5-15 and Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Cerami et al. to additionally include the administration of a cholinergic agent because one of ordinary skill in the art would reasonably expect the ocular compositions containing an additional cholinergic agent to reduce any ocular hypertension suffered by the patients in Cerami et al.

Moreover, Cerami et al. do not specifically disclose administering the elected 3-(2-phenyl-2-oxoethyl)-4,5-dimethyl-thiazolium chloride, however, the Examiner refers to col. 5, lines 28-29, where Cerami et al. teach that the halo atom used in the thiazolium compounds may also be chloride.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to administer 3-(2-phenyl-2-oxoethyl)-4,5-dimethyl-thiazolium chloride because, in view of Cerami et al.'s teaching, one of ordinary skill in the art would reasonably expect the chloride compound to be effective in treating lens proteins

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susceptible to aging. Such a modification would have been motivated by the reasonable expectation that the chloride compound would have similar properties, and thus the same use as the bromide compound.

With respect to the claimed method of "improving ocular accommodation" or decreasing intraocular pressure", this would have been obvious, if not inherent, from the disclosed method which discloses administration of identical active agents in identical dosage amounts to a host in need thereof using Applicant's claimed method steps.

Finally, concerning claim 17, since Cerami discloses that administration may occur by other conventional means, it would have been obvious to one of ordinary skill in the art to further modify the method of the prior art by administering the compounds intra-camerally because one of ordinary skill in the art would reasonably expect intra-cameral administration to effectively deliver the compounds to the eye.

### ***Response to Arguments***

Applicant's arguments filed 11 July 2006 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

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*Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Applicants argue that Cerami does not mention any cholinergic agent. That being true, it is Lotti which discloses a method of reducing intraocular pressure and treating glaucoma in mammals by topically administering a cholinergic agonist, i.e. pilocarpine and a cholinergic antagonist (please see col. 1, lines 5-15). And although Lotti does not explicitly disclose the claimed active, it suggests the use of cholinergic antagonists for the treatment of IOP. Since it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Cerami et al. to additionally include the administration of a cholinergic agent because one of ordinary skill in the art would reasonably expect the ocular compositions containing an additional cholinergic agent to reduce any ocular hypertension suffered by the patients in Cerami et al. (such as those being treated for cataracts (see claim 183), the combined references teach and make prima facie obvious how to use the claimed invention at the time that it was made.

Further, Applicant argues the references individually to the extent of what each teaches and what each reference does not teach. Although Examiner does not find persuasive Applicant's arguing of the individual teachings of each reference, Examiner points to col 3 lines 28-35 and col 1 lines 38-45 in the Lotti reference to show the teachings of combination therapy and the references suggestion to combine applicable and efficacious therapies. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642

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F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

### ***Conclusion***

No claim is allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michel Graffeo whose telephone number is 571-272-8505. The examiner can normally be reached on 9am to 5:30pm Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

16 January 2007  
MG

 4/17/07  
ARDIN H. MARSCHEL  
SUPERVISORY PATENT EXAMINER